

# SEQUENCE LISTING

<110> Herrman, Rafael  
Wong, James F.  
Lee, Jian-Ming

<120> SCORPION TOXINS

<130> BB1367 US NA

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<150> 60/140,227  
<151> 1999-06-22

<160> 28

<170> Microsoft Office 97

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gctatgggat tcaactcagg aaaatgtata aacagtaaat gtaaatgcta taaataa 177

<210> 2  
<211> 58  
<212> PRT  
<213> Hottentotta judaica

<400> 2  
Met Ser Arg Ile Phe Thr Ile Ile Leu Ile Val Phe Ala Leu Asn Ile  
1 5 10 15  
Ile Ile Ser Leu Ser Asn Phe Lys Val Glu Ala Ala Gln Cys Tyr Ser  
20 25 30  
Ser Asp Cys Arg Val Lys Cys Ala Ala Met Gly Phe Asn Ser Gly Lys  
35 40 45  
Cys Ile Asn Ser Lys Cys Lys Cys Tyr Lys  
50 55

<210> 3  
<211> 186  
<212> DNA  
<213> Hottentotta judaica

<400> 3  
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cacgctcaat acgagttgga tgtaacgtgt atgggaggag cagataattg cgtaaaaacca 120  
tgctatgata aatacggcac aactaaaact aaatgcatac acgatcgggtg caactgttat 180  
ccgtaa 186

<210> 4  
<211> 61  
<212> PRT  
<213> Hottentotta judaica

<400> 4  
Met Lys Phe Phe Thr Ser Val Leu Met Met Met Ile Ile Phe Ser Met  
1 5 10 15

Val Ile Ser Ser His Ala Gln Tyr Glu Leu Asp Val Thr Cys Met Gly  
20 25 30

Gly Ala Asp Asn Cys Val Lys Pro Cys Tyr Asp Lys Tyr Gly Thr Thr  
35 40 45

Lys Thr Lys Cys Ile Asn Asp Arg Cys Asn Cys Tyr Pro  
50 55 60

<210> 5  
<211> 180  
<212> DNA  
<213> Hottentotta judaica

<400> 5  
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<210> 6  
<211> 59  
<212> PRT  
<213> Hottentotta judaica

<400> 6  
Met Lys Phe Ser Ser Ile Ile Leu Leu Thr Leu Leu Ile Cys Ser Met  
1 5 10 15

Thr Ile Cys Ile Asn Cys Gln Val Glu Thr Asn Val Lys Cys Thr Gly  
20 25 30

Gly Ser Cys Ala Ser Thr Cys Lys Arg Val Ile Gly Val Ala Ala Gly  
35 40 45

Lys Cys Ile Asn Gly Arg Cys Val Cys Tyr Pro  
50 55

<210> 7  
<211> 171  
<212> DNA  
<213> Hottentotta judaica

<400> 7  
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<210> 8  
<211> 56  
<212> PRT  
<213> Hottentotta judaica

<400> 8  
Met Ser Arg Leu Phe Thr Leu Val Leu Ile Val Leu Ala Met Asn Val  
1 5 10 15

Met Met Ala Ile Ile Ser Asp Pro Gly Val Glu Ala Val Asp Cys Glu  
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Glu Cys Pro Phe His Cys Ala Gly Lys Asn Ala Ile Pro Thr Cys Asp  
35 40 45

Asp Gly Glu Cys Asn Cys Asn Val  
50 55

<210> 9  
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<212> DNA  
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<400> 9  
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tcccagcaaa atgccccgagc aaaatgtgaa aatgacaaat gtgtatgcga acctaaatga 180

<210> 10  
<211> 59  
<212> PRT  
<213> Hottentotta judaica

<400> 10  
Met Lys Met Ser Arg Leu Tyr Ala Ile Ile Leu Ile Val Leu Val Met  
1 5 10 15

Asn Val Ile Met Thr Ile Met Pro Asp Ser Lys Val Glu Ala Val Gly  
20 25 30

Cys Glu Asp Cys Pro Glu His Cys Ser Gln Gln Asn Ala Arg Ala Lys  
35 40 45

Cys Glu Asn Asp Lys Cys Val Cys Glu Pro Lys  
50 55

<210> 11  
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<212> DNA  
<213> Hottentotta judaica

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aatcttagaa ggtgtcagtt aattttaga gaaagtgat tattaggaaa gtgcatttga 180  
gatagatgcg aatgtgttcc acatggcaaa taa 213

<210> 12  
<211> 70  
<212> PRT  
<213> Hottentotta judaica

<400> 12  
Met Ile Lys Glu Leu Leu Ser Thr Glu Met Tyr Asn Tyr Tyr Lys Phe  
1 5 10 15

Val Leu Ile Met Val Val Phe Phe Ala Ala Thr Ile Ile Phe Ser Asp  
20 25 30

Ile Asn Val Glu Gly Ala Phe Cys Asn Leu Arg Arg Cys Gln Leu Ile  
35 40 45

Cys Arg Glu Ser Gly Leu Leu Gly Lys Cys Ile Gly Asp Arg Cys Glu  
50 55 60

Cys Val Pro His Gly Lys  
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<210> 13  
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aagaaatgtt gcggaatatg gtggggaaaa tgtgctggtt atcagtgcgt ctgtccaatg 180  
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<210> 14  
<211> 61  
<212> PRT  
<213> Hottentotta judaica

<400> 14  
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1 5 10 15  
Met Ile Ala Thr His Ser Glu Ala Arg Cys Pro Asn Cys Phe Thr Thr  
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Asn Pro Asn Ala Glu Ala Asp Cys Lys Lys Cys Cys Gly Asn Arg Trp  
35 40 45  
Gly Lys Cys Ala Gly Tyr Gln Cys Val Cys Pro Met Lys  
50 55 60

<210> 15  
<211> 176  
<212> DNA  
<213> Hottentotta judaica

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aaagtaacag gatcaggaca aggaaagtgc cagaataacc aatgtcgttg ttatta 176

<210> 16  
<211> 58  
<212> PRT  
<213> Hottentotta judaica

<400> 16  
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Gly Val Cys Ile Glu Ala Gly Leu Ile Asp Val Arg Cys Ser Ala Ser  
20 25 30  
Arg Glu Cys Trp Glu Ala Cys Arg Lys Val Thr Gly Ser Gly Gln Gly  
35 40 45  
Lys Cys Gln Asn Asn Gln Cys Arg Cys Tyr  
50 55

<210> 17  
<211> 177  
<212> DNA  
<213> Hottentotta judaica

<400> 17  
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aaagtaactg gacggtttca aggaaaatgc cagaataaac aatgtcgttg ttattaa 177

<210> 18  
 <211> 58  
 <212> PRT  
 <213> Hottentotta judaica

<400> 18  
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 1 5 10 15

Ser Ile Tyr Ser Glu Ala Asp Leu Ile Asp Val Lys Cys Ile Ser Ser  
 20 25 30

Gln Glu Cys Trp Ile Ala Cys Lys Lys Val Thr Gly Arg Phe Gln Gly  
 35 40 45

Lys Cys Gln Asn Lys Gln Cys Arg Cys Tyr  
 50 55

<210> 19  
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<220>  
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<210> 20  
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 <212> PRT  
 <213> Hottentotta judaica

<220>  
 <221> UNSURE  
 <222> (30)

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 20 25 30

Cys Trp Pro Ile Cys Lys Glu Arg Phe Gly Val Ala Arg Gly Lys Cys  
 35 40 45

Ile Asn Lys Gln Cys Arg Cys Tyr Ser  
 50 55

<210> 21  
 <211> 62  
 <212> PRT  
 <213> Centruroides noxius

<400> 21  
 Met Glu Gly Ile Ala Lys Ile Thr Leu Ile Leu Leu Phe Leu Phe Val  
 1 5 10 15

Thr Met His Thr Phe Ala Asn Trp Asn Thr Glu Ala Ala Val Cys Val  
20 25 30

Tyr Arg Thr Cys Asp Lys Asp Cys Lys Arg Arg Gly Tyr Arg Ser Gly  
35 40 45

Lys Cys Ile Asn Asn Ala Cys Lys Cys Tyr Pro Tyr Gly Lys  
50 55 60

<210> 22

<211> 59

<212> PRT

<213> Androctonus australis

<400> 22

Met Lys Val Phe Ser Ala Val Leu Ile Ile Leu Phe Val Cys Ser Met  
1 5 10 15

Ile Ile Gly Ile Asn Ala Val Arg Ile Pro Val Ser Cys Lys His Ser  
20 25 30

Gly Gln Cys Leu Lys Pro Cys Lys Asp Ala Gly Met Arg Phe Gly Lys  
35 40 45

Cys Met Asn Gly Lys Cys Asp Cys Thr Pro Lys  
50 55

<210> 23

<211> 28

<212> PRT

<213> Leiurus quinquestriatus

<400> 23

Val Gly Cys Glu Glu Cys Pro Met His Cys Lys Gly Lys Asn Ala Lys  
1 5 10 15

Pro Thr Cys Asp Asn Gly Val Cys Asn Cys Asn Val  
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<210> 24

<211> 29

<212> PRT

<213> Leiurus quinquestriatus

<400> 24

Val Ser Cys Glu Asp Cys Pro Asp His Cys Ser Thr Gln Lys Ala Arg  
1 5 10 15

Ala Lys Cys Asp Asn Asp Lys Cys Val Cys Glu Pro Lys  
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<210> 25

<211> 31

<212> PRT

<213> Leiurus quinquestriatus

<400> 25

Ala Phe Cys Asn Leu Arg Met Cys Gln Leu Ser Cys Arg Ser Leu Gly  
1 5 10 15

Leu Leu Gly Lys Cys Ile Gly Asp Lys Cys Glu Cys Val Lys His  
20 25 30

<210> 26

<211> 35

<212> PRT  
 <213> Androctonus mauretanicus

<400> 26  
 Cys Gly Pro Cys Phe Thr Thr Asp Pro Tyr Thr Glu Ser Lys Cys Ala  
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 Thr Cys Cys Gly Gly Arg Gly Lys Cys Val Gly Pro Gln Cys Leu Cys  
 20 25 30

Asn Arg Ile  
 35

<210> 27  
 <211> 36  
 <212> PRT  
 <213> Leiurus quinquestriatus

<400> 27  
 Gly Leu Ile Asp Val Arg Cys Tyr Asp Ser Arg Gln Cys Trp Ile Ala  
 1 5 10 15  
 Cys Lys Lys Val Thr Gly Ser Thr Gln Gly Lys Cys Gln Asn Lys Gln  
 20 25 30

Cys Arg Cys Tyr  
 35

<210> 28  
 <211> 37  
 <212> PRT  
 <213> Buthus martensii

<400> 28  
 Xaa Phe Thr Asp Val Lys Cys Thr Gly Ser Lys Gln Cys Trp Pro Val  
 1 5 10 15  
 Cys Lys Gln Met Phe Gly Lys Pro Asn Gly Lys Cys Met Asn Gly Lys  
 20 25 30

Cys Arg Cys Tyr Ser  
 35

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